

Spring flowering bulbs usually require a rooting period of about 12 to 15 weeks at temperatures between 41-48°F in order to produce a good root system, which is essential if they are to be "forced" into flower. Commonly forced bulb flowers are amaryllis, paper-white narcissus, muscari and hyacinths. Certainly they are the easiest. However, other bulbs that can be forced include colchicum and miniature iris.

### Storing Bulbs

If you can't pot them right away, bare bulbs can be stored for several weeks in your refrigerator before potting up if they are packed properly. However, don't store bulbs in the same drawer where you keep ripening fruit or vegetables. They give off ethylene gas which can harm the bulbs. (Also some bulbs are poisonous, so this storage method is not recommended for households with young children.) Bulbs will still require a cool-temperature rooting period after they have been potted.

The best way to store them is in a mesh bag or paper bag with holes that permit ventilation. You don't have to worry about water, as the humidity inside a refrigerator is usually high enough. Check them periodically to make sure they are not molding or drying out.

### Potting Bulbs for Cooling/Rooting

Pot your bulbs right away if you have a cool location immediately available, such as an old (functioning) refrigerator, a root cellar or cool basement — or if outdoor temperatures are below 45°F. Your refrigerator can serve as a suitable rooting area if you have the pot space.

Use clean pots with drainage holes (the depth will depend on the bulbs being grown). Allow for 2 inches of soil below the bulb and select a pot large enough to allow the top of the bulb to be even with the rim when placed on the soil. Different types of bulbs require differing periods of time to root well. For this reason it is not advisable to combine different types of bulbs in the same pot.

Plain potting soil is fine. You can add some bone meal or special fertilizer formulated for bulbs, just a "pinch" per bulb, to the soil mixture. Place 2 inches of soil in the pot, then gently place bulbs into position. Add enough soil to fill the pot, firming the soil gently around the bulbs being careful not to bruise them. Water well in order to settle the soil around the bulbs. Bulbs can be planted very close together, even touching, and make the best show in "crowded" arrangements.

Label each pot with the name of the variety, planting date, and the date you intend to bring it out of storage for forcing. Bulbs will flower some 3-4 weeks after they have been brought into warmer temperatures. Thus, from time of planting to flowering, allow a period of 15 weeks--12 weeks for rooting and 3 weeks in warmer temperatures to flower. It is easier to hold bulbs back than to speed them up, so when you know the date you want them to be in flower, calculate accordingly the best planting time. For Valentine's Day flowers, for example, plant bulbs in early- to mid-October.

The following timetable will help you plan a forcing schedule and achieve flowering at a given date. Remember that these can vary, and in all cases, the bulbs must be well rooted before being forced.

- To flower in January, plant in September or very early October
- To flower in February, plant early- to mid-October
- To flower later, plant in late October or early November

There are exceptions: amaryllis and Paperwhite narcissus.

### Forcing Blooms

The actual forcing begins at the stage when you remove the bulbs from the root-growing environment into warmth and light, triggering the growth of leaves and flowers. Sunshine and temperature are the

most important factors in promoting successful flowering. Most bulbs will require about 3 or 4 weeks from the time they are removed from cold storage before they bloom.

After the rooting period specified for your particular bulb variety (generally at least 12-14 weeks), transfer the pots to a place indoors with indirect sunlight and temperatures about 60°F for a week or two.

When the shoots are 4-6 inches tall, move the pots to a bright, sunny window to stimulate blooming. A temperature of about 68°F and direct sunlight will produce the best results. When the buds take on color, return the plants to indirect sunlight to make the blossoms last. Keep the soil moist at all times.

If blossoms begin to develop too quickly, you may be able to retard blooming a bit by moving the pots out of direct sunlight and into a cooler location. Move them back to sunlight and warmer temperatures when you want them to resume growing.

After blooming, hardy bulbs such as hyacinths and tulips cannot be forced again and should be discarded. Or they can be planted outdoors where they may rebloom within a year or two.

### **NO-CHILL, Easy Paperwhite Narcissus**

Paperwhites (narcissus tazetta), 'Soleil d'Or', 'Chinese sacred lily' and colchicum are among the most popular forcing flowers that don't require the 12-week rooting period. They are easy to start and can give you indoor blooms from Thanksgiving until late March, if planted successively, batch after batch in late fall. Paperwhites are most often (and most easily) potted in shallow containers of gravel. Place bulbs on a layer of gravel and carefully fill in enough gravel to hold bulbs but not cover them. A crowded grouping will be the most attractive. Add water to the container. It should go just to the base of the bulbs, but not touching the bulbs. Place container in a sunny spot, step back and watch 'em grow! You'll see roots in a day or so and in three to five weeks you'll have gorgeous flowers.

### **The Easiest Bulbs for Forcing**

- **Paperwhite narcissus**; popular bulb; grows in soil or gravel
- **amaryllis**; popular Christmas plant (plant bulb in early November, no cooling necessary)
- **large-flowering crocus**; requires 12-14 week rooting period; bulbs can be potted in gravel and water for different effect
- **hyacinth**; fragrant spring-time favorite; requires about 12 weeks for rooting; can be forced in special "hyacinth" vases using only water
- **colchicum**; excellent for forcing, can even grow on a window sill without soil or water; begins blooming in about two weeks
- **muscaria**; requires 16 week rooting time; pot plenty, they're small
- **iris**; especially iris reticulata are easy to force, but need careful attention to drainage; require about 15 weeks for rooting; don't hold iris bulbs too long before potting; tall-stemmed iris are less suited to forcing

### **Other Dutch Bulbs for Forcing**

- Forced tulips require a fairly long rooting period at a constant temperature to be successful. Allow at least 15 weeks. Experiment with a few pots of different varieties. Tulip Tip: Plant bulbs with flat side facing the rim, this will position the larger outer leaves toward the pot rim, where they will drape gracefully over the edge of the pot.
- Daffodils require very bright light, such as that found in a greenhouse, to flower well. Too little sun results in leggy growth and no blossoms. Only the miniature varieties (hybrid) daffodils are recommended for home forcing. Daffodils usually require a 12-14 week rooting period. Once removed from the rooting area, daffodils must be placed in a location that receives lots of sun, say an enclosed porch or sun room or under a skylight.